



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Shihō NAKAMURA, et al.

SERIAL NO: 10/721,549

GAU:

FILED: November 26, 2003

EXAMINER:

FOR: MAGNETIC CELL AND MAGNETIC MEMORY

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

**REFERENCES**

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**RELATED CASES**

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**CERTIFICATION**

- Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

**DEPOSIT ACCOUNT**

- Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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**STATEMENT OF RELEVANCY****Reference AA (US 5,695,864) on Form PTO 1449:**

This reference discloses magnetic device with current induced magnetic switching. But nonmagnetic layer is a conductor. Free layer does not have two other ferromagnetic layers aligned antiparalell.

**Reference AB (US 6,469,926) on Form PTO 1449:**

This reference discloses the magnetic element with a bottom pinned and a top pinned layers. But it is not for the device in which O or I signal is written according to the current flowing direction perpendicular to the plane.

**Reference AW on Form PTO 1449:**

This reference discloses experimental confirmation of current induced magnetic switching. But the device does not have two other ferromagnetic layers aligned antiparallel. (Fig. 1 (a) of page 3810)

**Reference AX on Form PTO 1449:**

This reference discloses experimental result of current induced magnetic switching. But the device does not have two other ferromagnetic layers aligned antiparallel. (Fig. 1 (b) of page 3664)



Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 245994US2TTCRD	SERIAL NO. 10/721,549		
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT Shiho NAKAMURA, et al.					
		FILING DATE November 26, 2003		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,695,864	12/09/1997	J. C. SLONCZEWSKI			
	AB	6,469,926	10/22/2002	E. Y. CHEN			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION		
	AO				YES	NO	
	AP						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
AW	F. J. ALBERT, et al., Applied Physics Letters, vol. 77, no. 23, pages 3809-3811, "SPIN-POLARIZED CURRENT SWITCHING OF A Co THIN FILM NANOMAGNET", December 4, 2000						
AX	J. GROLLIER, et al., Applied Physics Letters, vol. 78, no. 23, pages 3663-3665, "SPIN-POLARIZED CURRENT INDUCED SWITCHING IN Co/Cu/Co PILLARS", June 4, 2001						
AY							
AZ				<input type="checkbox"/> Additional References sheet(s) attached			
Examiner				Date Considered			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							